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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/535,676	03/23/2000	Mayer D. Schwartz	7049 US	2181
7590		10/02/2003	EXAMINER	
Francis I Gray		FERRIS, DERRICK W		
Tektronic Inc		ART UNIT		
P O Box 500		2663		
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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/535,676

Applicant(s)

SCHWARTZ ET AL.

Examiner

Derrick W. Ferris

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 March 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 March 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2. 6) ☐ Other: _____

DETAILED ACTION

Specification

1. The abstract of the disclosure is objected to because the abstract should be on a separate sheet of paper. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 2 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In particular, applicant recites in claim 2 a step of “*replacing B-type pictures at the input to the smoothing buffer with null B-type pictures when the smoothing buffer is in an overflow condition until the overflow condition ceases*”. Examiner has determined the subject matter disclosed in the above claim 2 to be “essential” to applicant’s invention (in reference to MPEP 608.01(p)). Support of the “essential” material was found in applicant’s specification at page 6, lines 5-10. Specifically page 6, lines 5-10 disclose that support for the limitation is provided by applicant’s co-pending application 09/113,669 to *Stevens et al.* Examiner notes page 6, lines 5-10 fails to provide “an identification” of specific portions relevant to the limitation(s) recited in claim 2 (see MPEP 608.01(p)(a)). As a result the examiner is requesting applicant to (1) provide a copy for the record of the copending abandoned application and (2) provide “an identification” of where

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to find the relevant information in the copending application. In addition, examiner has read application 09/113,669 and has determined (1) no recitation of a "B-type" picture and (2) an improper combination of two separate and distinct inventions. In particular, examiner notes the co-pending application is silent to a "B-type" picture and there is no correlation between the instant invention and co-pending application to cure the deficiency. In addition, the co-pending application discloses re-adjusting the bit rate at any point (see page 3, lines 20-24), however, the particular embodiments teach incorporating the functionality before multiplexing (and not after demultiplexing as claimed by applicant) as supported at page 6 and as shown in figures 1 and 3 of the co-pending application (e.g., note that the buffer fullness monitor 18 and 22 are between an encoder and multiplexer and not between a demultiplexer and decoder). Thus it appears that the *Stevens et al.* application actually teaches away from application's instant invention since the re-adjustments of bit rates as disclosed by *Stevens et al.* occurs before multiplexing (instead of a smoothing buffer after demultiplexing). In order to overcome the 112-first paragraph rejection, examiner is requesting applicant to also clearly and distinctly pointing out support in the co-pending application for these two issues.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claim 1** is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,566,208 to *Balakrishnan*.

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As to **claim 1**, *Balakrishnan* discloses adjusting the encoder buffer to control the channel bit rate. In particular, examiner notes support for variable rates over a constant rate connection (e.g., column 4, lines 64-67; column 5, lines 1-8).

Examiner notes what may be at issue is the placement of a “smoothing buffer” with respect to a decoder. Examiner notes that it would have been obvious to someone skilled in the art prior to applicant’s invention to place a smoothing buffer prior to decoding using a reasonable but broad interpretation of the term “prior”. In particular, *Balakrishnan* cures the deficiency by disclosing two buffers that aid in “smoothing”, one buffer 20 after encoding and another at the decoder 22 (e.g., see figure 3), both of which are “prior” to decoding. Thus both buffers cure the deficiency.

5. **Claim 2** is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,566,208 to *Balakrishnan* in view of U.S. Patent No. 5,847,765 to *Sanpei*.

As to **claim 2**, examiner notes a reasonable but broad interpretation of “b-type pictures”(i.e., “b-type” pictures are “I-pictures” and “P-pictures” of an MPEG frame). *Balakrishnan* is generally silent on how buffer overflow is prevented (see column 5, lines 9-19). Examiner notes that it would have been obvious to someone skilled in the art prior to applicant’s invention to replace “B-type” pictures at the input of the smoothing buffer with null “b-type” pictures when buffer overflow occurs. *Sanpei* cures the deficiency by disclosing repeatedly reading out “I-pictures” and “P-pictures”. Thus *Sanpei* provides a motivation for using “b-type” pictures [e.g., see column 4, lines 19-45].

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6. **Claim 2** is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,566,208 to *Balakrishnan* in view of EP 0692911 A2 to *Egawa et al.* ("*Egawa*").

As to **claim 2**, examiner notes a reasonable but broad interpretation of "b-type pictures"(i.e., "b-type" pictures as null information). *Balakrishnan* is generally silent on how buffer overflow is prevented (see column 5, lines 9-19). Examiner notes that it would have been obvious to someone skilled in the art prior to applicant's invention to replace "B-type" pictures at the input of the smoothing buffer with null "b-type" pictures when buffer overflow occurs. *Egawa* cures the deficiency by disclosing null information to prevent buffer overflow (see abstract). Thus *Egawa* provides a motivation for using null information such as B-type pictures for smoothing.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- US006529552B1 discloses transmitting VBR video over constant capacity networks (i.e., CBR).
 - US 20030106069A1 discloses using a decoding buffer and demultiplexing before decoding (see figure 1) as well as buffer smoothing (see figure 2).
 - US006052384A discloses preventing buffer overflow by using a smoothing buffer after multiplexing.
 - WO 01/39505 A2 discloses converting VBR traffic to CBR traffic as well as inserting null packets.

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- GB 2 356 323 discloses converting VBR traffic to CBR traffic. Filing date is before applicant's but publishing date is after applicant's filing date.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Derrick W. Ferris whose telephone number is (703) 305-4225.


The examiner can normally be reached on M-F 9 A.M. - 4:30 P.M. E.S.T.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (703) 308-5340. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 305-3900.

Derrick W. Ferris
Examiner
Art Unit 2663


DWF


CHI PHAM
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600 9/25/03